

A

The HER-2/neu promoter

5' CCCGGGGTCTCTGGAAGCCACAAGGTAAACACAACACATCCCCCTCCTGGACTATGCAAT
 TTTACTAGAGGATGTGGTGGGAAAACCATTATTTGATATTAAAACAAATAGGCTTGGGATGG
 AGTAGGATGCAAGCTCCCCAGGAAAAGTTTAAGATAAAACCTGAGACTTAAAAGGGTGTTAAG
 AGTGGCAGCCTAGGGAATTTATCCCGGACTCCGGGGAGTCACCAGCCTCTGCATTTAGGGAT
 TCTCCGAGGAAAAGTGTGAGAACGGCTGCAGGCAACCCAGGCGTCCCGGCGCTAGGAGGGAC
 GACCCAGGCCTGCGCGAAGAGAGGGAGAAAAGTGAAGCTGGGAGTTGCCGACTCCCAGACTTC
 GTTGAATGCAGTTGGAGGGGGCGAGCTGGGAGCGCGCTTGCTCCCAATCACAGGAGAAGGA
 GGAGGTGGAGGAGGAGGGCTGCTTGAGGAAGTATAAGAATGAAGTTGTGAAGCTGAGATTCC
 CCTCCATTGGGACCGGAGAAACCAGGGGAGCCCCCGGGCAGCCGCGCGCCCCCTTCCCACGG
 GGCCCTTTACTGCGCCGCGCGCCCCGGCCCCCACCCCTCGCAGCACCCCGCGCCCCGCGCCCT
 CCCAGCCGGGTCCAGCCGAGCCATGGGGCCGGAGCCGCGAGTGAGCACCATG-3'

B

Schematic representation of the promoter

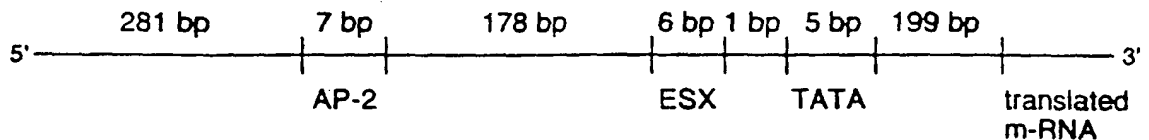
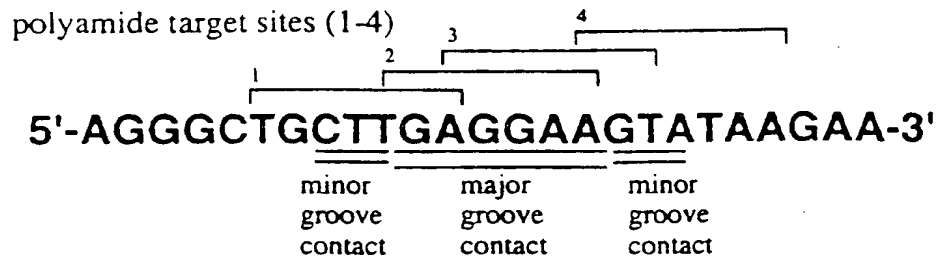


Fig. 1

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The ESX promoter site



B

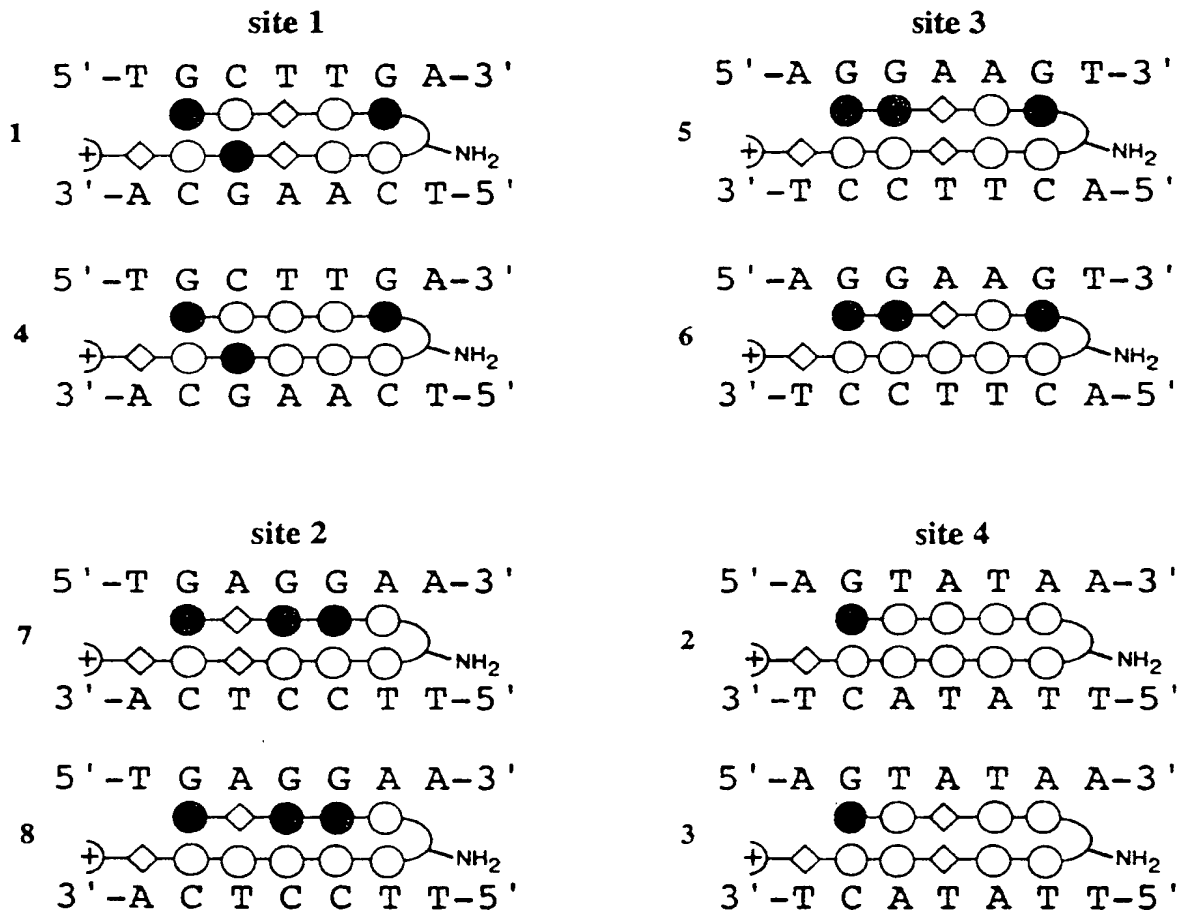
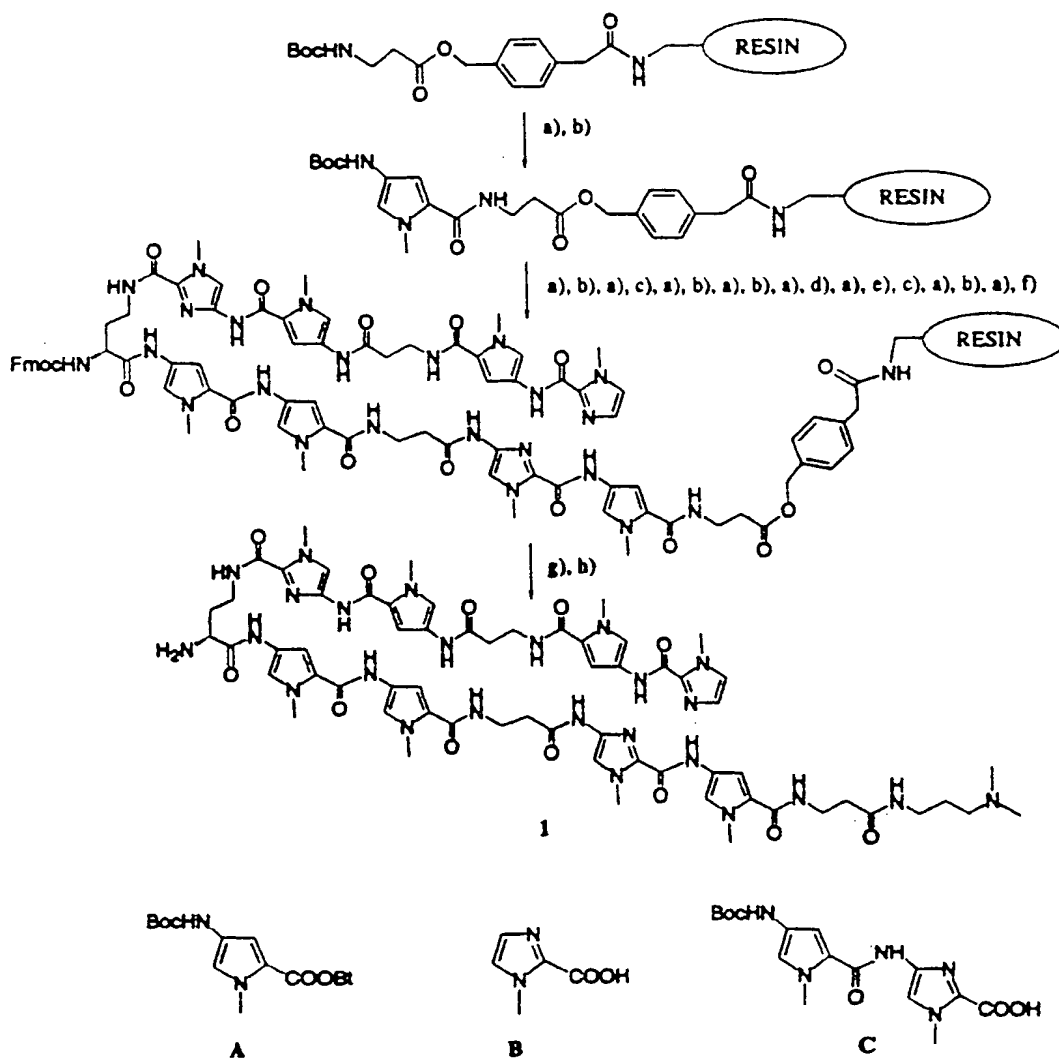


Fig. 2



a) CF_3COOH . b) **A**, $(i\text{Pr}_2)\text{NEt}$, DMF. c) Boc- β -alanine, HBTU, $(i\text{Pr}_2)\text{NEt}$, DMF. d) N- α -Fmoc-N- γ -Boc-D-diamino butyric acid, HBTU, $(i\text{Pr}_2)\text{NEt}$, DMF. e) **C**, HBTU, $(i\text{Pr}_2)\text{NEt}$, DMF. f) **B**, HBTU, $(i\text{Pr}_2)\text{NEt}$, DMF. g) 20% piperidine, DMF. h) (N,N-dimethylamino)propylamine; prep. HPLC.

Fig. 3

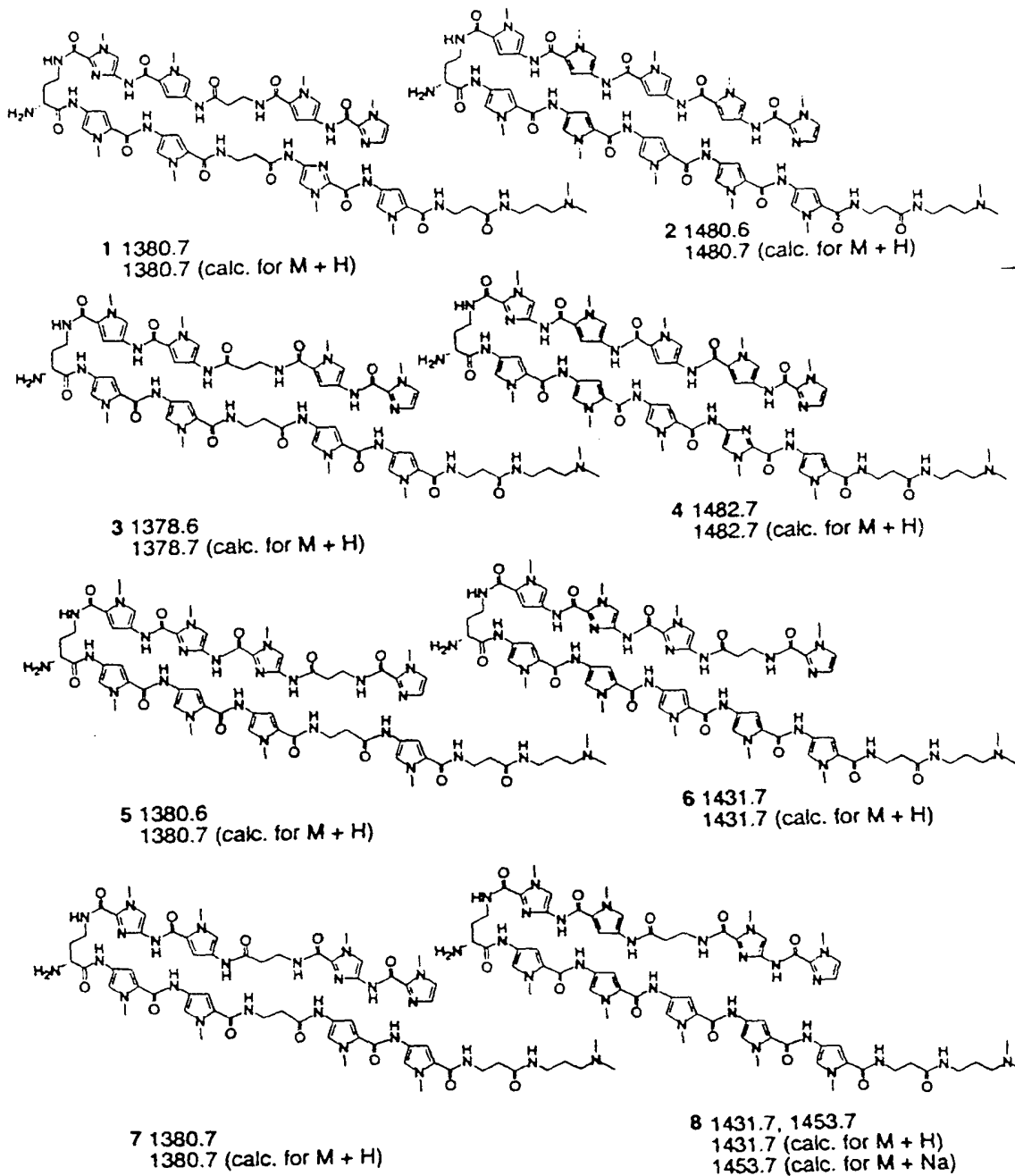


Fig. 4

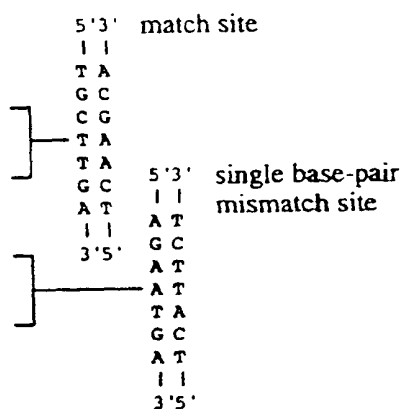
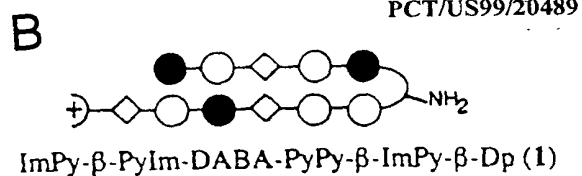
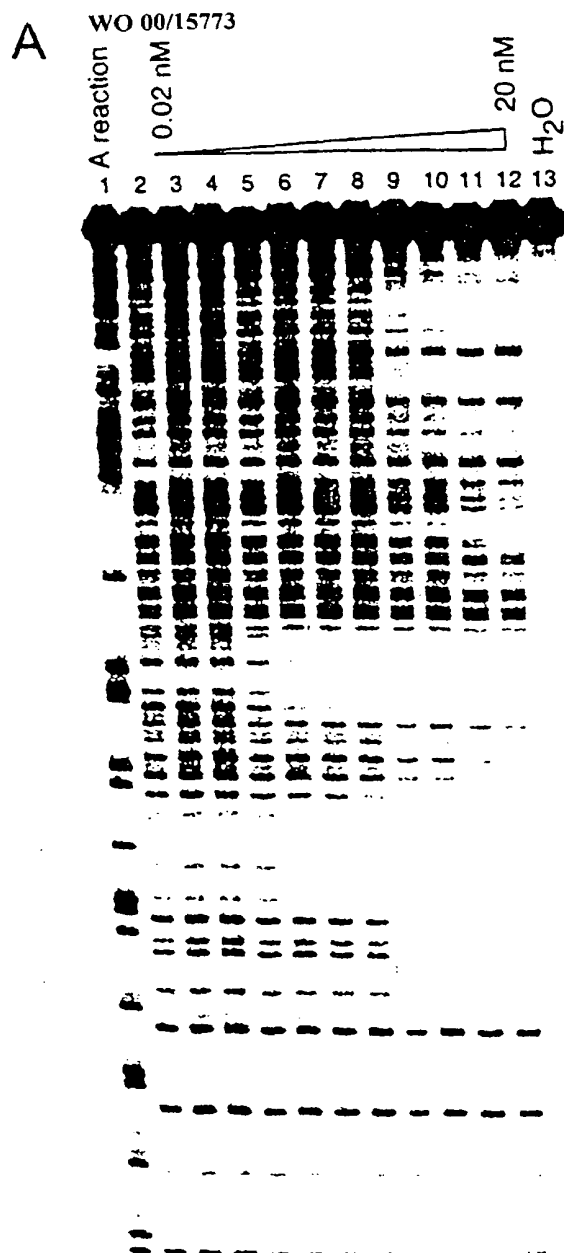
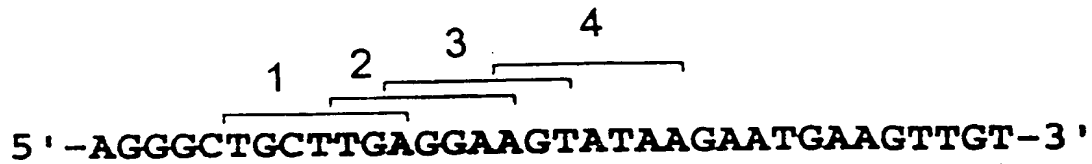


Fig. 5

A



B

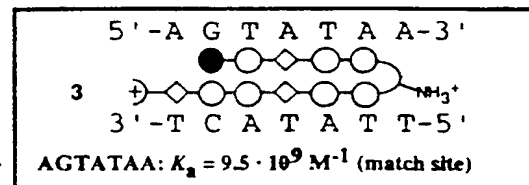
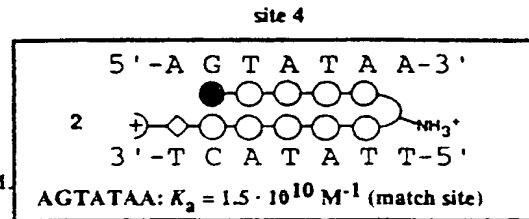
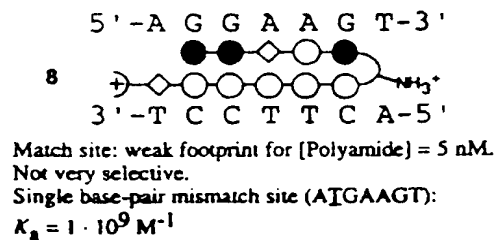
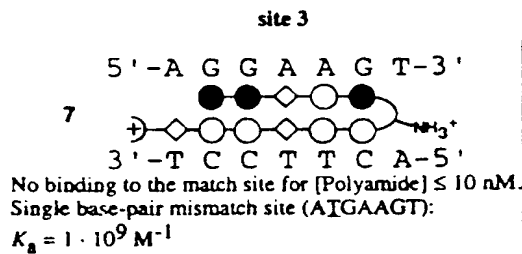
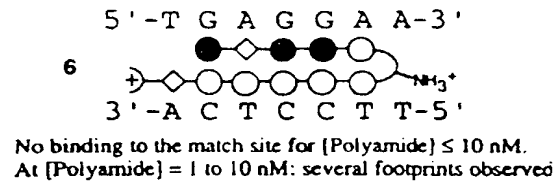
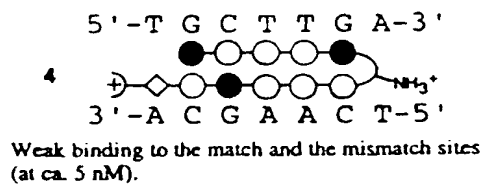
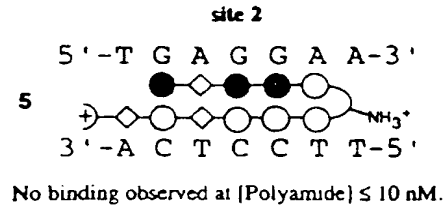
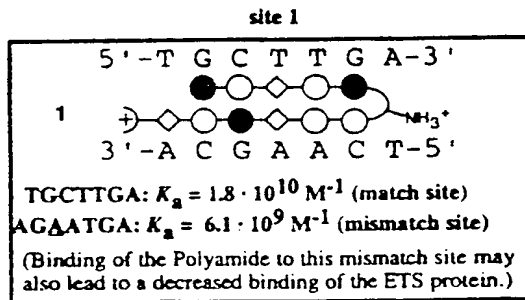


Fig. 6

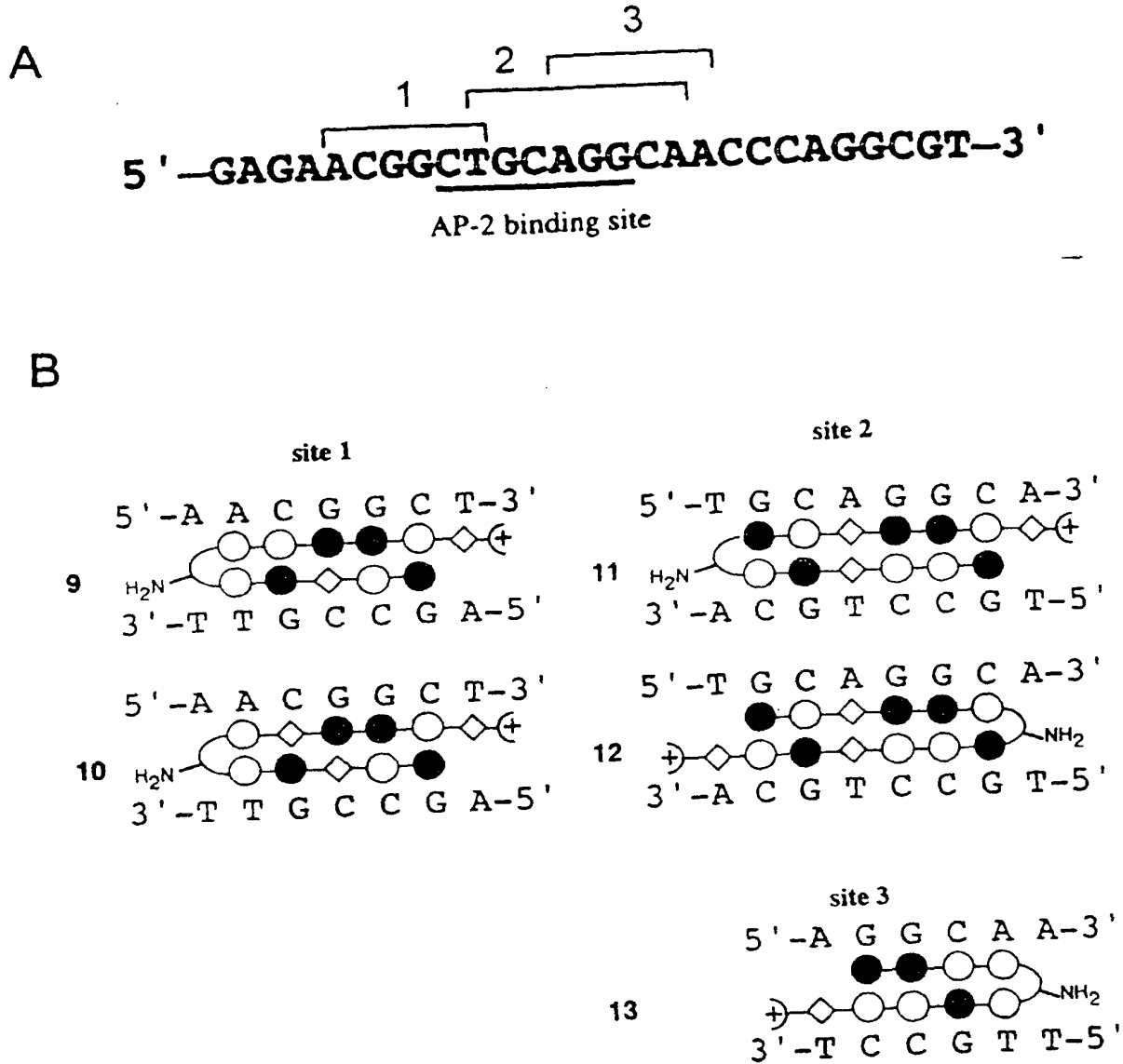
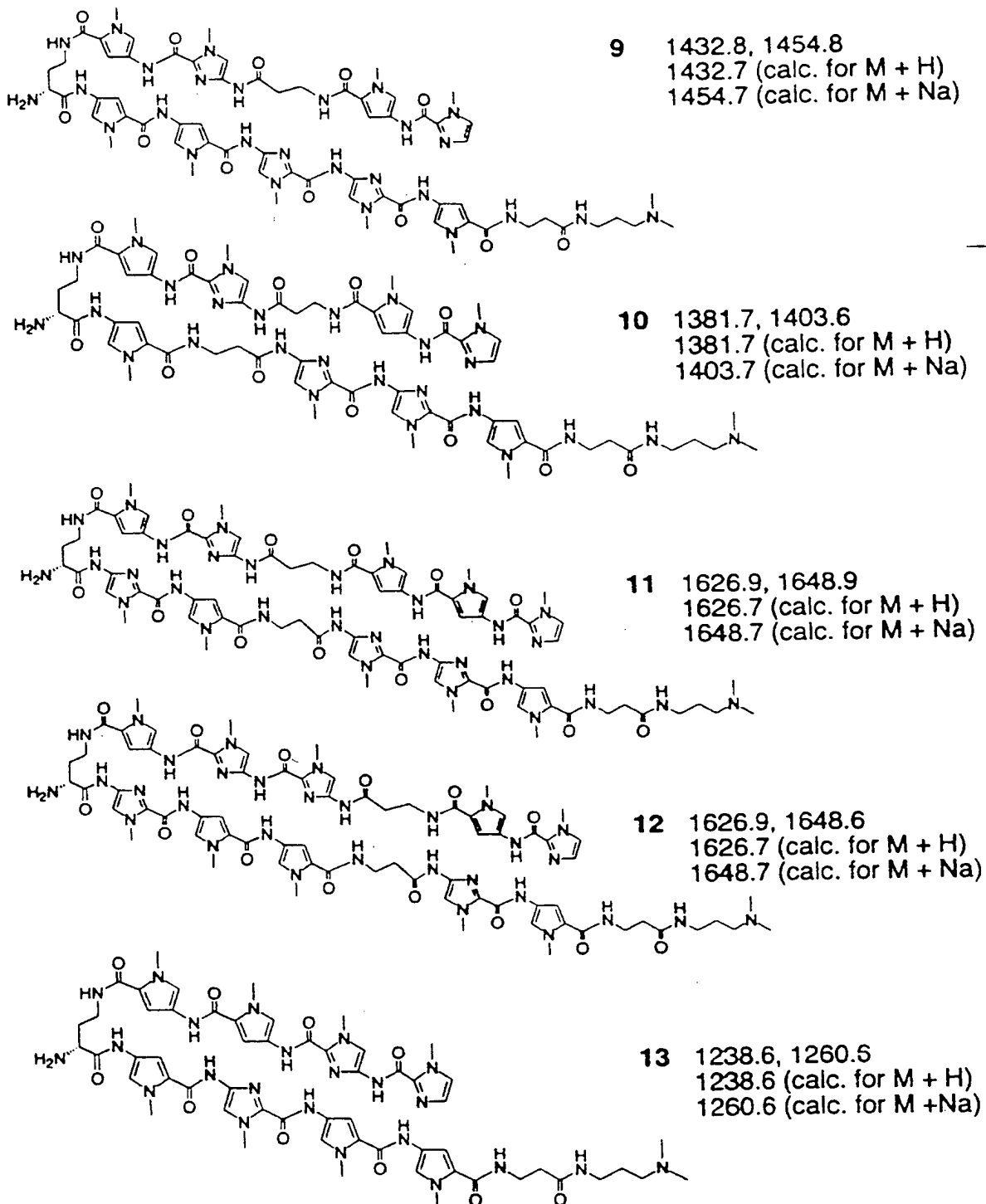
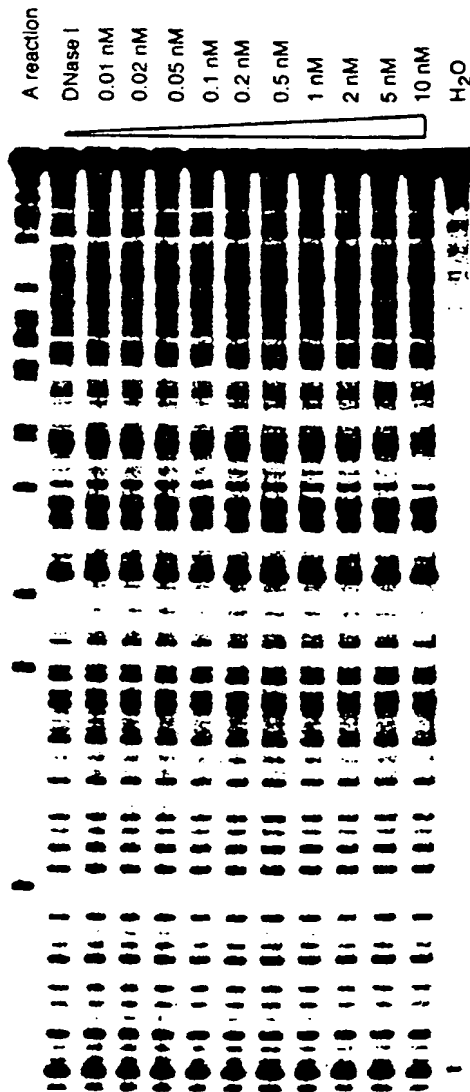


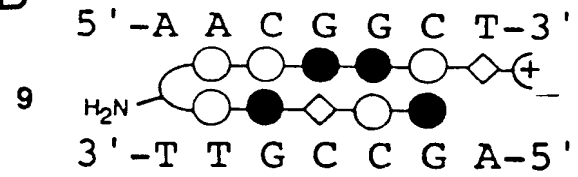
Fig. 7

**Fig. 8**

A



B



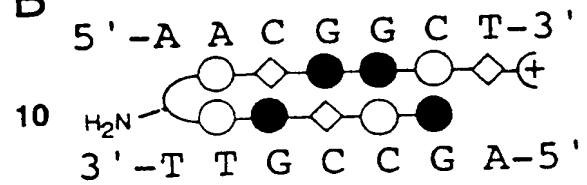
no binding observed.

Fig. 9

A



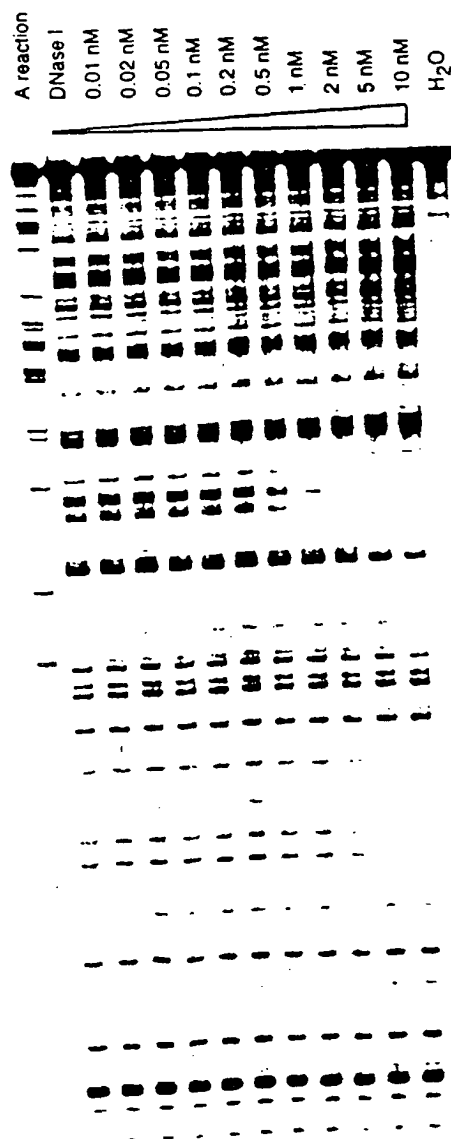
B



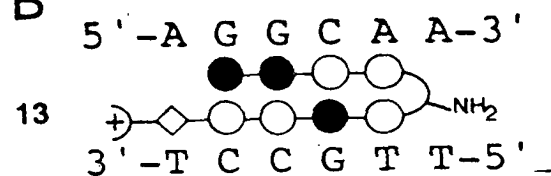
match site: $K_a = 8.7 \times 10^{10} \text{ M}^{-1}$

Fig. 10

A



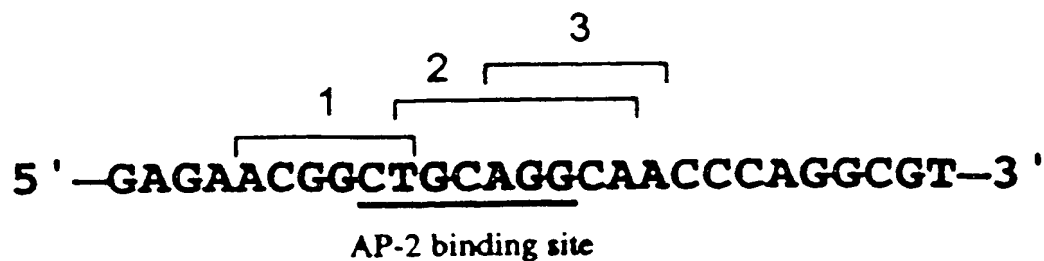
B



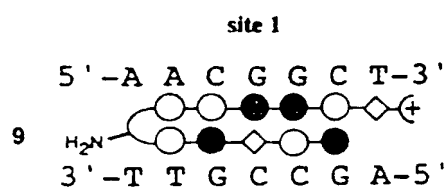
match site: $K_a = 3.0 \times 10^9 \text{ M}^{-1}$

Fig. 11

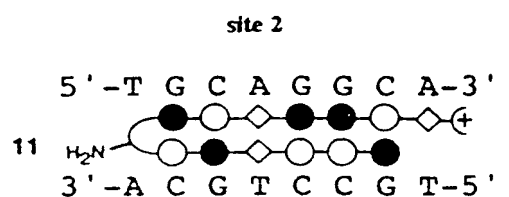
A



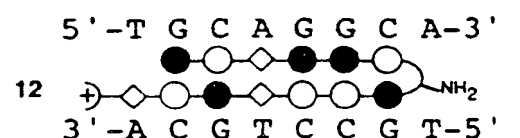
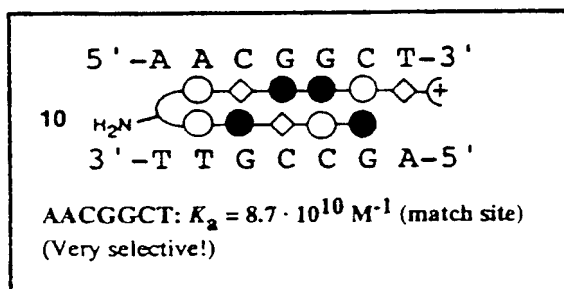
B



No binding observed at concentrations of
9 < 10 nM.



TGCAGGCA: $K_a = 6.5 \cdot 10^9 \text{ M}^{-1}$ (match site)
(Several binding sites with $K_a = \text{ca. } 2 \cdot 10^8 \text{ M}^{-1}$.)



TGCAGGCA: $K_a = 5.8 \cdot 10^9 \text{ M}^{-1}$ (match site)
(Several binding sites with $K_a = \text{ca. } 2 \cdot 10^8 \text{ M}^{-1}$.)

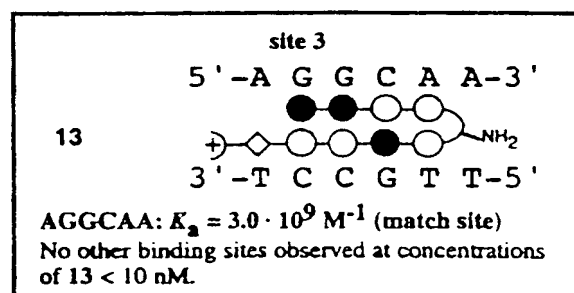


Fig. 12

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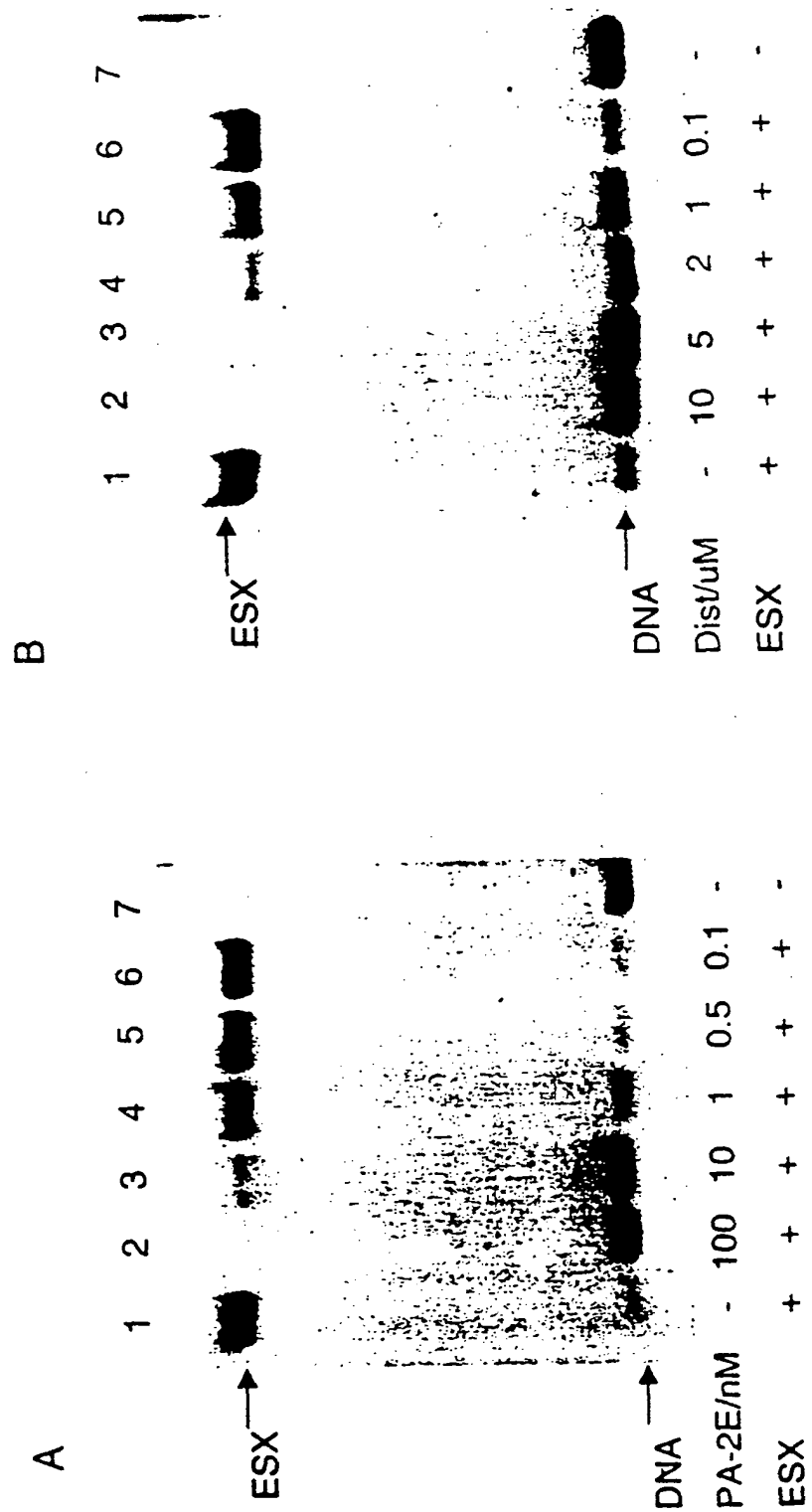
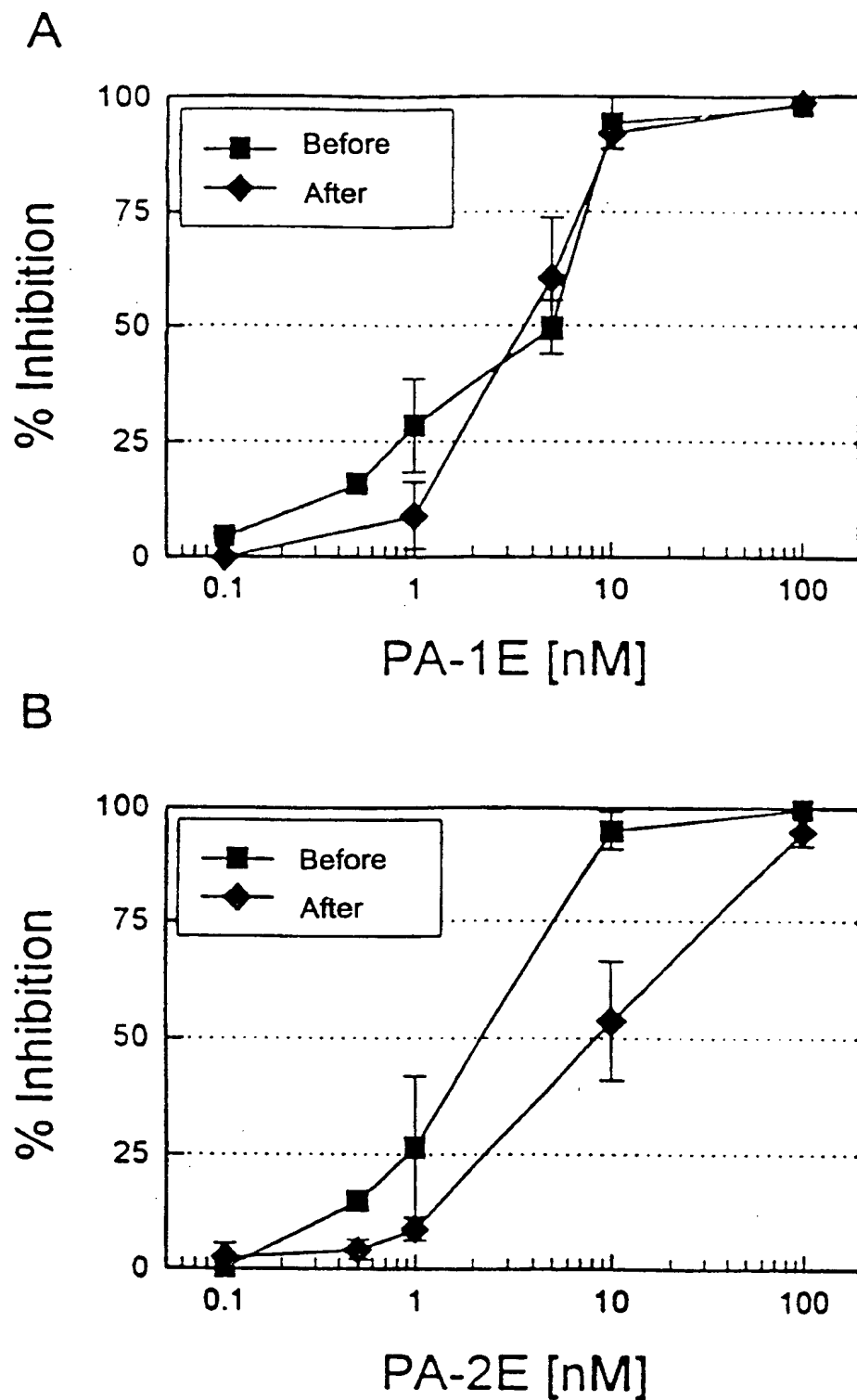


Fig. 13

**Fig. 14**

C

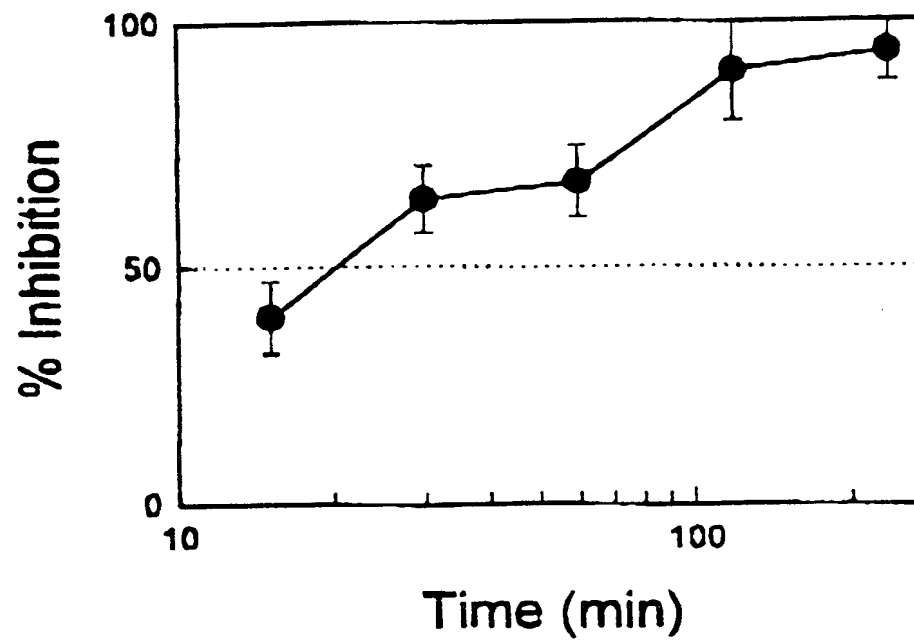
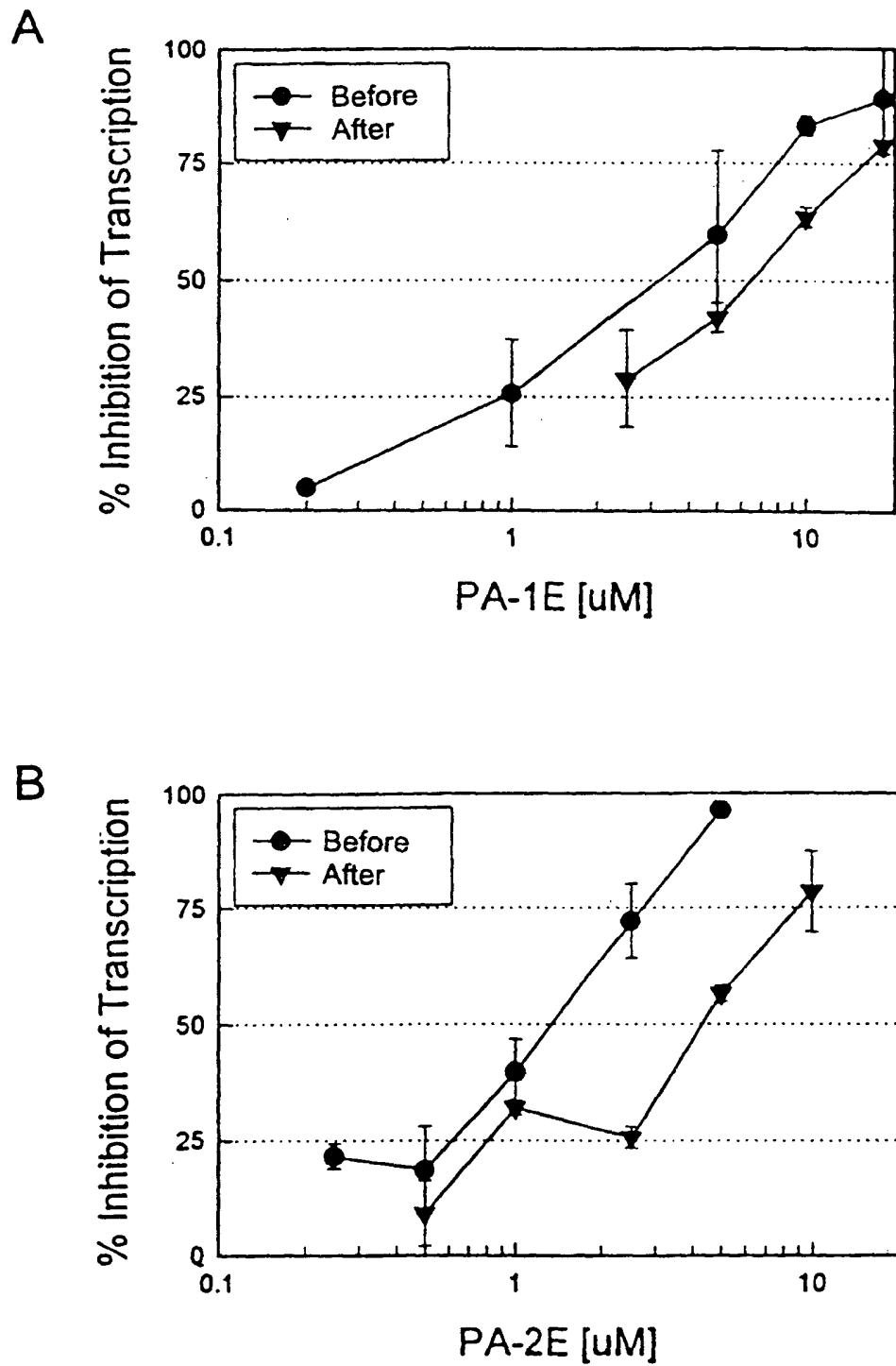
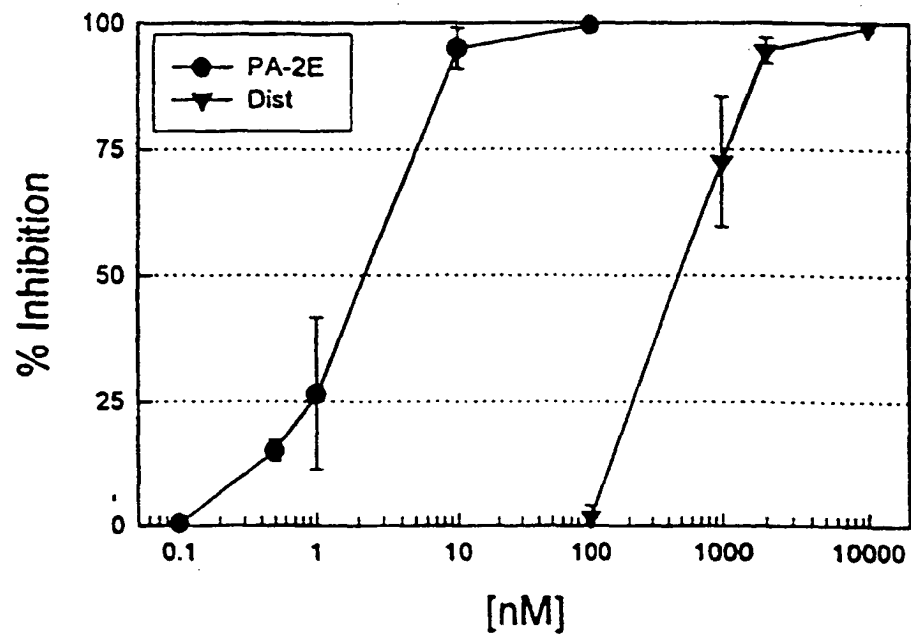
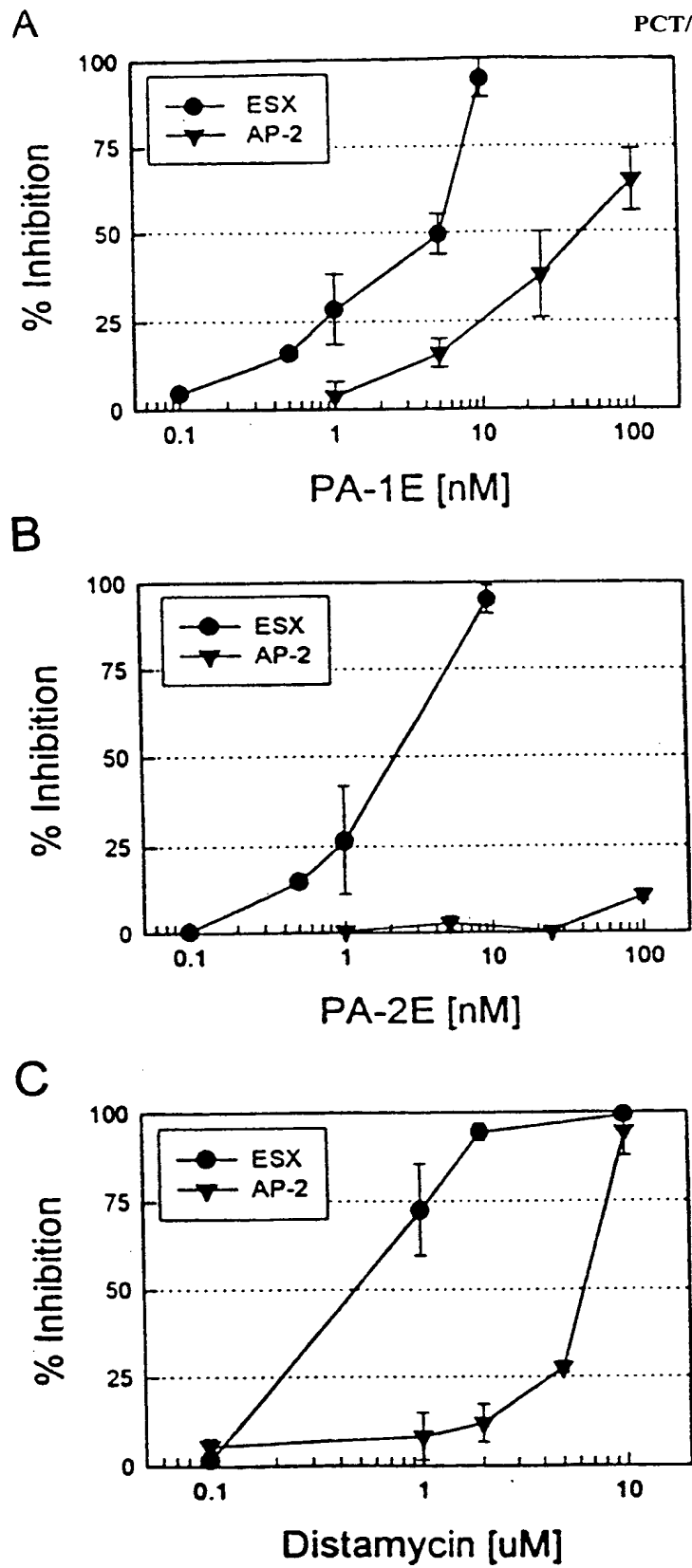
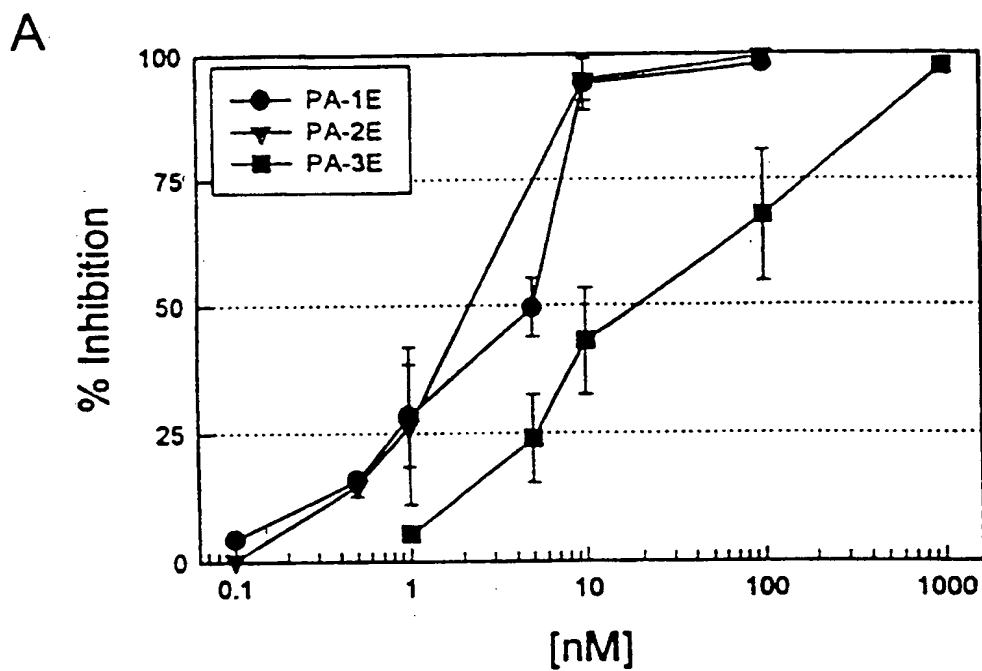


Fig. 14

**Fig. 15**

**Fig. 16**

**Fig. 17**



B

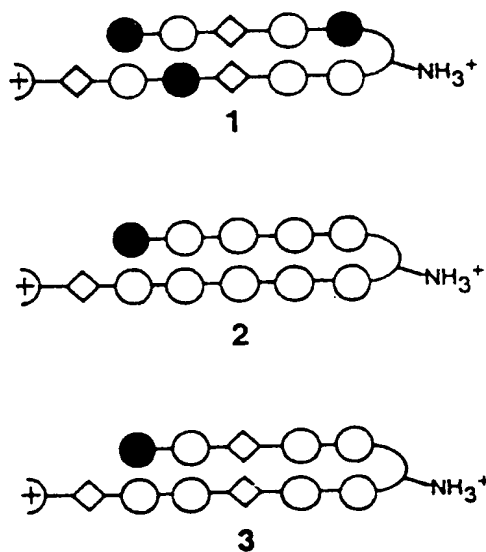


Fig. 18

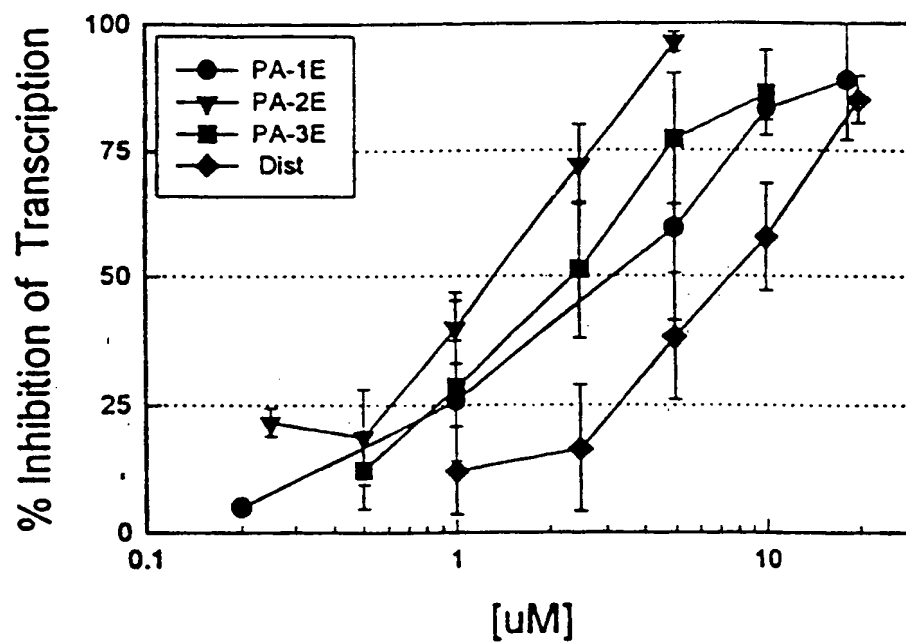


Fig. 19